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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,112	12/01/2003	Yasumasa Shimizu	Q78705	9923
7590 06/16/2004 SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 Pennsylvania Avenue, N.W. Washington, DC 20037-3213			EXAMINER GORDON, RAEANN	
			ART UNIT 3711	PAPER NUMBER

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/724,112

**Applicant(s)**

SHIMIZU ET AL.

**Examiner**

Raeann Gorden

**Art Unit**

3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8-11, 16 and 17 is/are rejected.
- 7) ☒ Claim(s) 4-7, 12-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12-1-03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 8-11, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voorheis et al (2003/0229183) in view of Gendreau et al (4,955,613). Regarding claim 1, Voorheis discloses a golf ball comprising a core made from a) 49% polybutadiene synthesized with a lanthanide series element (rare earth metals) having a cis-1,4 bond content of at least 80%, b) 0.05 to 18 phr organic peroxide, c) unsaturated carboxylic acid, d) sulfur based curing agents, and e) fillers. The core has a diameter from 1.4 to 1.6 inches (35.56-40.64 mm)(para.11). Voorheis discloses the core includes up to 49% of the lanthanide polybutadiene but does not disclose values from 60 to 100 as claimed by Applicant. However, Gendreau teaches a core comprising from 15 to 85 parts of a lanthanide polybutadiene. With respect to the mantle, Voorheis discloses at least one intermediate layer comprising ionomer resins with a thickness from 0.010 to 0.10 inch (0.254 to 2.54 mm) and a Shore C hardness of at least 80 (53 Shore D) (para. 39). Voorheis discloses the cover is made from thermoplastic polyurethane or ionomers and has a thickness from 0.01 to 0.20 inches (0.254-5 mm) (para. 11, 43-44). The cover has a Shore D hardness of less than 60 (para. 46). The

Art Unit: 3711

cover may have a hardness lower than the intermediate layer (see above). Voorheis in view of Gendreau in combination teach the deformation of the core and golf ball since the materials are the same. Regarding claim 2, Voorheis discloses an intermediate layer with a Shore C hardness of at least 80 (53 Shore D) (para. 39). Regarding claim 3, Voorheis discloses the lanthanide metal is neodymium. Regarding claim 8, the intermediate layer may be made from polyester (para 40). Regarding claims 9-11, 16, and 17, the claims further include an additional intermediate layer, Voorheis discloses the golf ball includes at least one intermediate layer. One skilled in the art would have modified Voorheis in view of Gendreau to achieve the golf ball properties.

### ***Allowable Subject Matter***

Claims 4-7 and 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raeann Gorden whose telephone number is 703-308-8354. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Raeann Gorden  
Primary Examiner  
Art Unit 3711

Rg  
June 10, 2004